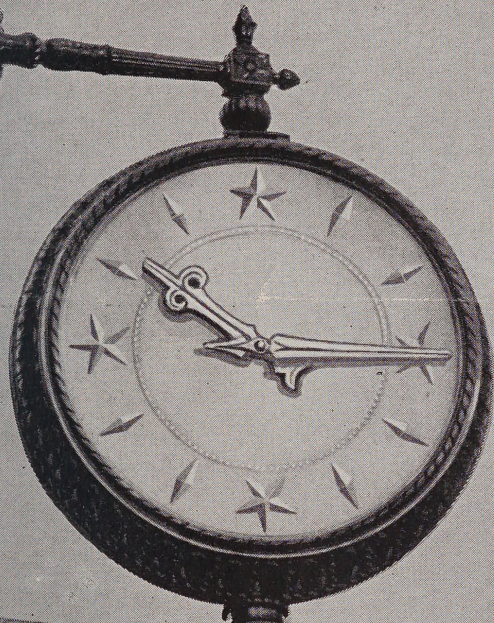


SELF WINDING CLOCKS

T R A D E M A R K

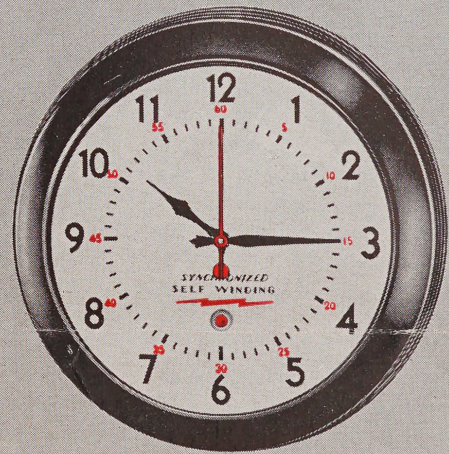
ALWAYS SHOW CORRECT TIME



OUTDOOR

...unique hourly correction

...self contained power



INDOOR

THE ONLY CLOCKS USED IN THE
WESTERN UNION
NAVAL OBSERVATORY TIME SERVICE

SELF WINDING CLOCK COMPANY, INC., 205 Willoughby Avenue, Brooklyn 5, N. Y.



STANDARD STYLES



STYLE 25

12" dial 15 $\frac{1}{8}$ " square, 4 $\frac{1}{4}$ " deep
15" dial 19 $\frac{1}{8}$ " square, 4 $\frac{1}{4}$ " deep

(15" dial available with seconds hand, also with translucent illuminated dial.)



STYLE 37

12" dial 15 $\frac{1}{8}$ " diameter, 4 $\frac{1}{4}$ " deep
15" dial 19 $\frac{1}{8}$ " diameter, 4 $\frac{1}{4}$ " deep

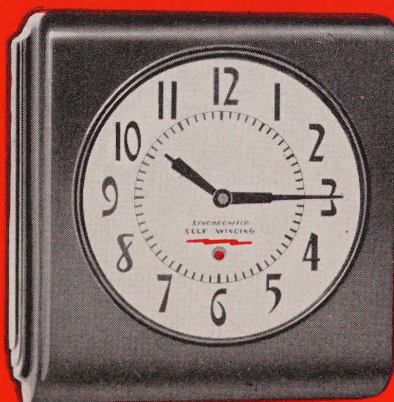
(15" dial size available with outdoor weather-proof case.

Or, see cover, with red sweep seconds hand and red five-seconds marks.)



STYLE 42

12" dial . . . 16" high, 16" wide, 4 $\frac{1}{4}$ " deep
(Also available with Style 25 dial—see above)



STYLE 43

12" dial . 16 $\frac{1}{8}$ " high, 15 $\frac{1}{2}$ " wide, 4 $\frac{1}{4}$ " deep
(Also available with Style 25 dial—see above)

Questions AND Answers

READING TIME . . . 3 MINUTES

What is a Self Winding Clock?

It is a clock that runs on a self contained power source and, therefore, requires no connection to any outside current supply. All "Western Union Naval Observatory Time" clocks are manufactured by the Self Winding Clock Co., as are all those labeled "Synchronized, Self Winding."

What will a Self Winding Clock do for me?

It will always show absolutely correct time independent of power failures, voltage drops or frequency changes. It will work even if there is no source of power in the vicinity.

Why does a Self Winding Clock never stop?

Two #6 dry cells inside the clock case, supply the power for a motor which winds the mainspring once per hour. A pendulum or jeweled lever escapement provide accurate time regulation. Batteries are replaced every year and a half or two years. If desired, outside A.C. or D.C. power can be provided for, in place of the batteries, and the mainspring winding reserve will carry over current interruptions.

Why does a Self Winding Clock show the correct time?

An electric signal, at regular intervals, usually hourly, resets the min-

ute hand to exactly the correct position, if it should happen to have gained or lost time ever so slightly, and also the seconds hand when used. This impulse is called a "synchronizing signal" and the process, "synchronization."

Where does the Hourly Synchronizing Signal come from?

A Naval Observatory Time Signal over Western Union Wires, or a signal from an accurate Master Clock. Where no automatic signal is available, a "manual synchronizing button" is supplied, which can be coordinated with a radio time signal.

What does the red light on the clock signify?

It is visual evidence of otherwise hardly noticeable movement of hands when clock is synchronized.

Can more than one clock be used on the same synchronizing wire?

As many clocks as desired, connected in series or parallel can be synchronized by the same signal.

What are the different types of clock systems?

1. *Primary Systems*—Each clock is its own master and receives its signal directly, such as from Western Union. Each clock is called a "Primary" clock because it has self contained power.

Typical Locations

Airlines	Laboratories
Auditoriums	Offices
Banks	Police Depts.
Bowling Alleys	Public Utilities
Bus Companies	Radio Stations
Churches	Railroads
Clubs	Schools
Factories	Ships
Fire Depts.	Signs
Gov't Bldgs.	Stores
Halls	Terminals
Hotels	Theatres
Institutions	Trains
Insurance Co's.	Travel Agencies
Jewelers	Transit Lines

SELF WINDING CLOCK COMPANY, INC.,

2. *Subsidiary Systems*—A group of interconnected primary clocks is controlled by a synchronizing signal from a master clock, which itself can be synchronized. Program clocks connected in such a system need no additional wiring.

3. *Secondary Systems*—Secondary clocks are advanced by a master in half minute steps over low voltage wires. Hourly correction of all the secondaries insures uniform time indication. The Self Winding "Silent Secondary" is so called because the driving force is applied magnetically through space to eliminate the noise inherent in a physical contact drive. Primary clocks, time stamps and program clocks can be added with no additional wiring.

How are clock systems wired?

Wiring diagrams are supplied whenever consideration is given to connecting two or more clocks.

What is a Control Clock?

A clock that regulates a system, or that regulates functions other than the turning of its own second, minute and hour hands.

What are the different types of Control Clocks?

1. *Master or Regulator Clock.* An accurate timekeeper furnished with contacts to close one or more circuits at predetermined intervals, for the sending out of synchronizing signals, secondary impulses, etc. Each circuit can furnish regular impulses, from every second to every twelve hours.

2. *Robot Control Clock.* A master clock that among other features provides automatic and quick resetting of an entire secondary clock system for any period of

time. For instance, when a ship crosses into a new time zone, the operator merely resets the master hands by one hour and the other clocks immediately follow suit.

3. *Program Clock.* These are arranged for five minute or one minute intervals. A disc within the clock can be set with clips, using a pair of pliers only, so that signals such as bells, chimes, buzzers, horns, whistles, etc., can be made to operate automatically at set times during the day, to mark the beginning and ending of important periods. Automatic control is provided for the ringing or silencing on nights, Saturdays, Sundays, or any desired 12 hour period. Up to four circuits can be equipped to allow one clock to control different signal schedules at separated locations. A 15 inch dial makes the Program Instrument useful as a clock itself.

4. *Time Recorder Clock.* Transmits minute impulses to control time stamps, time recorders and similar devices.

What are the exterior features of Self Winding Clocks?

1. *Dials.* From 12 inches in diameter, up, designed to blend with the case finish. Ivory toned backgrounds and brown figures are featured, also aluminum.

2. *Hands.* Usually black on the smaller sizes. Sweep Seconds hand used for Radio Stations, laboratories and similar locations.

3. *Cases.* Usually round or square and finished in a neutral, rich, golden bronze color, or if wood, with a natural grain finish.

4. *Glass.* Convex protection glass is provided on all metal cases.

SELF WINDING
CLOCKS

CONTROL CLOCKS

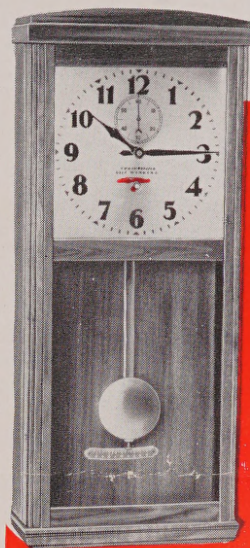
Regulator

(Master) Clock
Aluminum dial with seconds hand, Oak or Mahogany finish case.

Style 81 (illustrated) has 80 beat movement, 12" dial, $37\frac{1}{2} \times 15\frac{1}{2} \times 6\frac{1}{2}$ " case.

Style 61 has 60 beat movement, 15" dial, $58 \times 19\frac{3}{4} \times 7\frac{1}{2}$ " case.

Style 25 case, hands and dial, see page 2. 120 beat movement.



Program Instrument

Showing metal disc, with adjustable clips. Includes signal relay, push button and cut out switch for each circuit. Dial, 15", with seconds hand. Case, $19\frac{3}{8}$ " sq., $4\frac{1}{8}$ " deep.

Style P-164 (illustrated here) is adjustable for 5 minute intervals.

Style P-180 for 1 minute intervals.



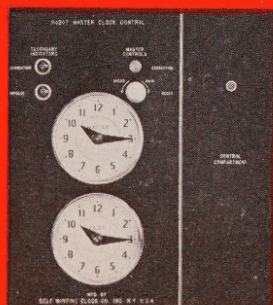
Time Recorder Control

Accurately transmits minute impulses to Control any make of time stamp, time recorder, clock or other device.

Style 25 Control Clock, 12" ivory dial, case $15\frac{1}{8}$ " sq., $4\frac{1}{8}$ " deep.

Typical Users

American Air Lines
American Express Co.
Associated Press
Bamberger's
Canadian Pacific Railway
Chesapeake & Ohio Trains
Grand Central Terminal
Hotel Commodore
N. Y. Stock Exchange
Pennsylvania Terminal
Schraft's
United Fruit Lines
West Point Academy
Western Union Offices
WOR, WCBS, WJZ ...



ROBOT CONTROL CLOCK

(Shown in Panel Mounting)

For automatic operating, correcting and resetting, of secondary system. Showing master dial, pilot dial that indicates position of all the secondaries, manual synchronization button, resetting knob and indicating lights. Special dials $3\frac{1}{2}$ " dia.





What are considered Special Clocks?

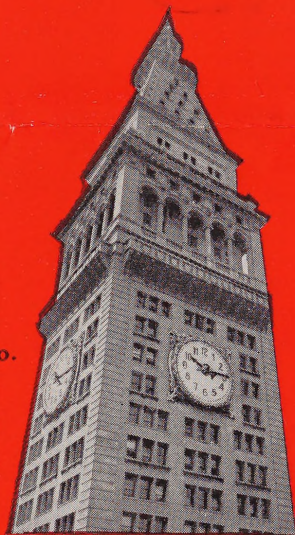
Advertising Clocks
Bracket Mounted Clocks
Flush Mounted Clocks
Illuminated Clocks
Marble Dial Clocks
Marine Movement Clocks
Marker Dial Clocks

Multiple Face Clocks
Ornamental Clocks
Recessed Clocks
Revolving Clocks
Skeleton Clocks
Tower Clocks
24-Hour-Dial Clocks

SPECIAL CLOCKS

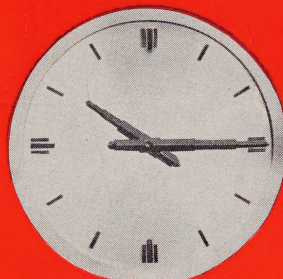
Franklin Savings Bank Clock *see illustration, page 1*

An illuminated outdoor clock which *revolves* twice each minute. Opposite side has advertising in the form of an engraved head of Benjamin Franklin encircled by the name of the bank. Dial is 40" in dia. This type of clock makes a building a landmark, "locates" a business, and at the same time performs a service to the community.



Metropolitan Life Insurance Co.

4 face tower clock with complete secondary system and master clock control. Note, each dial is three stories high.



National Cash Register Co.

Indoor marker clock conforming with interior decoration. Spun aluminum dial with rim to match. Raised satin black markers and hands. Front or rear access.



Spear and Company

Marker clock attached to outdoor sign. Hands are of steel finished with blue porcelain enamel to match the markers. Access is from the rear. Dial is 36" in diameter.

got a Clock Problem?

SELF WINDING CLOCK COMPANY CO-OPERATES WITH ENGINEERS, ARCHITECTS, USERS:



1. **STANDARD STYLES.** Merely ask for price, delivery and any additional information desired on any specific clocks illustrated in this folder.
2. **WHERE THERE IS A QUESTION** as to what type clock is needed, ask for a recommendation on clocks that will accomplish the desired result.
3. **SPECIAL CLOCKS.** Mention the type clock and location that you are considering and Self Winding Clock Co. will ask for any necessary additional details. Designs that conform with the intended use, interior decoration and architecture, will then be submitted for your approval.

SELF WINDING CLOCK COMPANY, INC.

205 WILLOUGHBY AVENUE

BROOKLYN 5, N.Y.